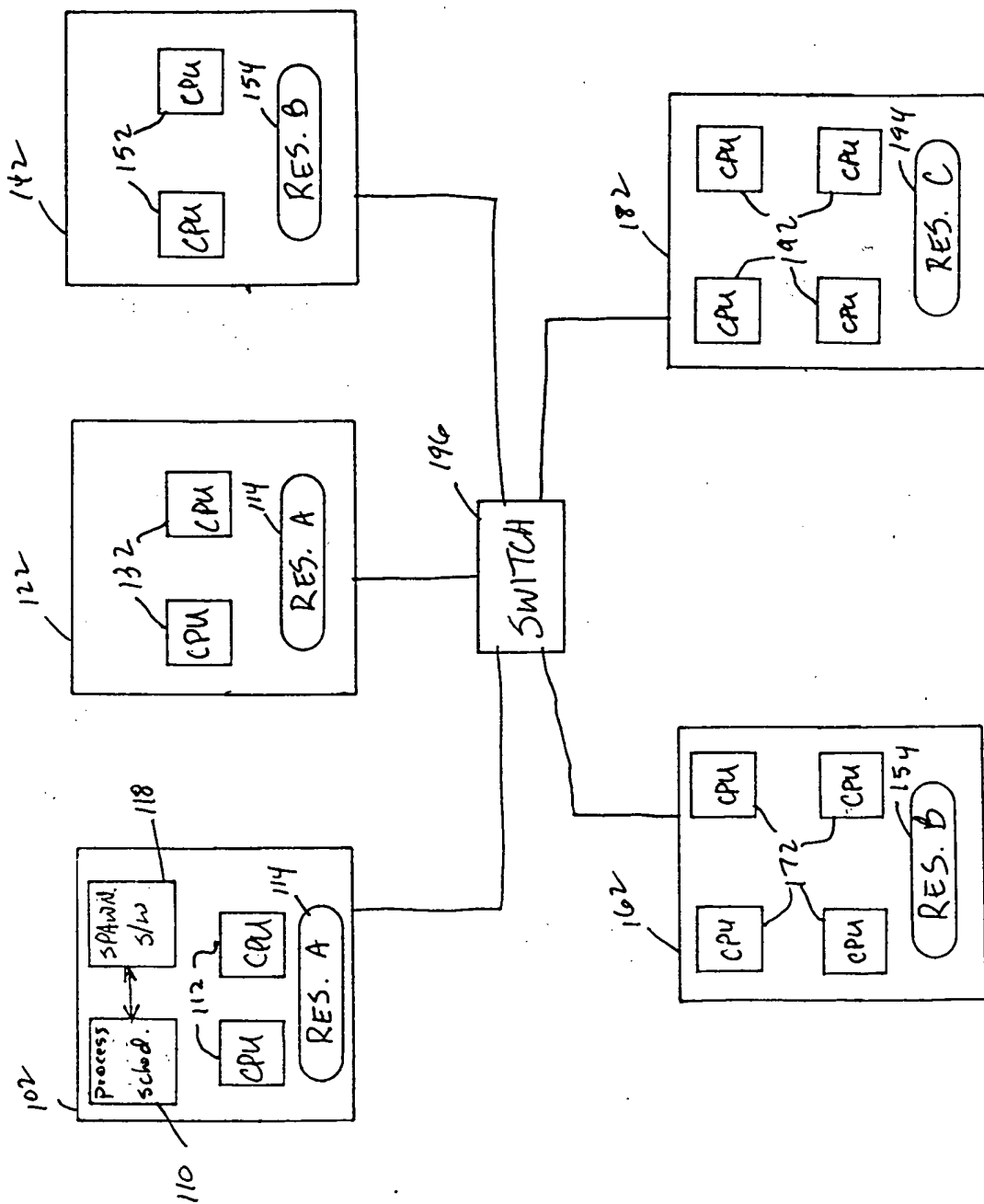FIG. 1

FIG. 2

200

208

Network initialized and
process sched. updated with
available resource

214

Processes spawned
automatically or
according to procedure
group file specifications

220

Run processes to
completion

FIG. 3

FIG.4

214

250

User specifies process group or automatic mode and, if automatic mode, user specifies application name and location, no. of processes desired and other optional parameters for spawning processes

252

Automatic mode ? — N → 254 Read process group file

256 Spawn processes as specified by process group file

Y

258 Compare user specified no. of processes and other parameters to available network features

260 Sufficient network resources ?

Y

N → 264 Reduce process count

266 Provide warning to user that fewer CPUs are available than initially desired

268 Spawn processes

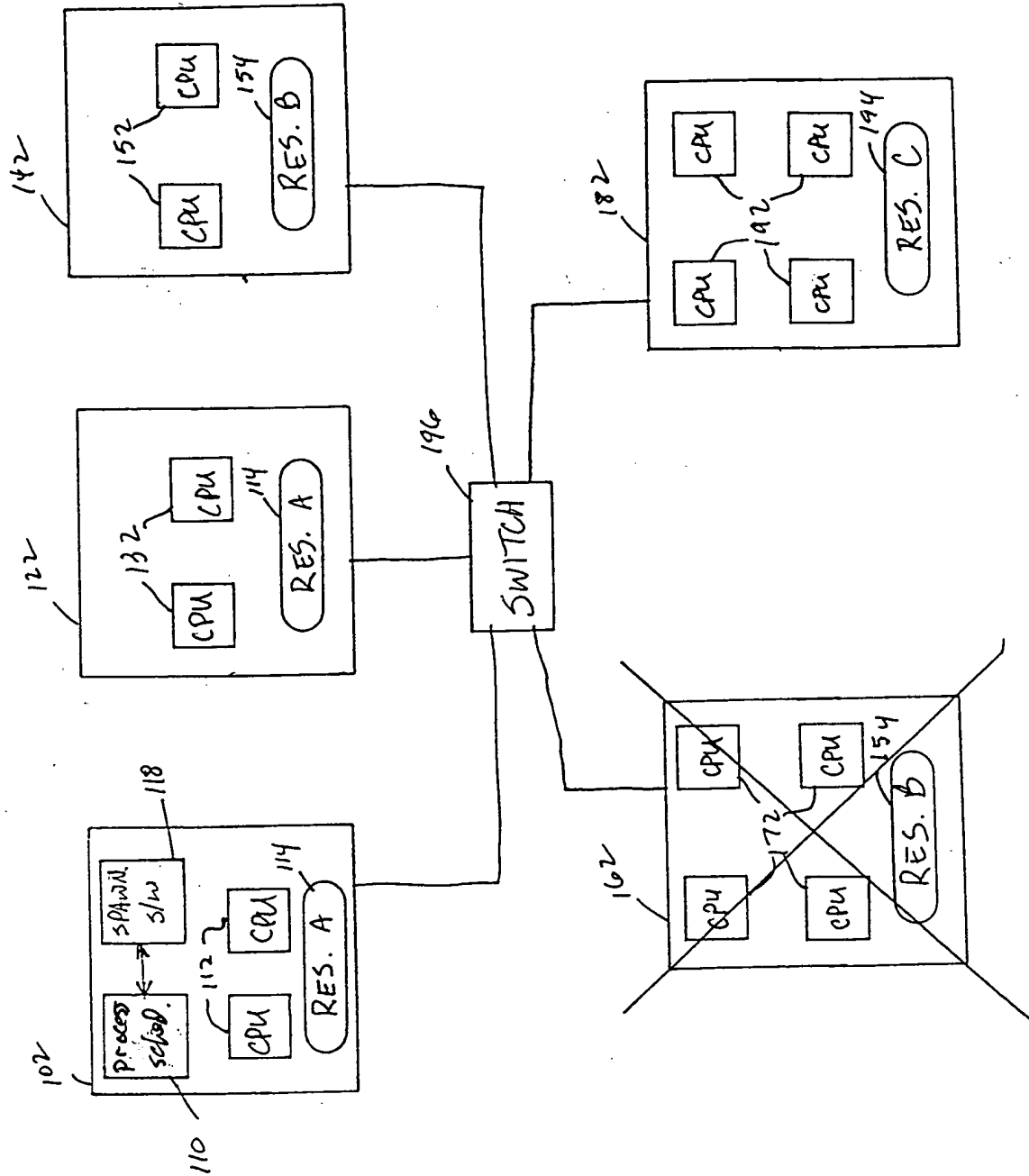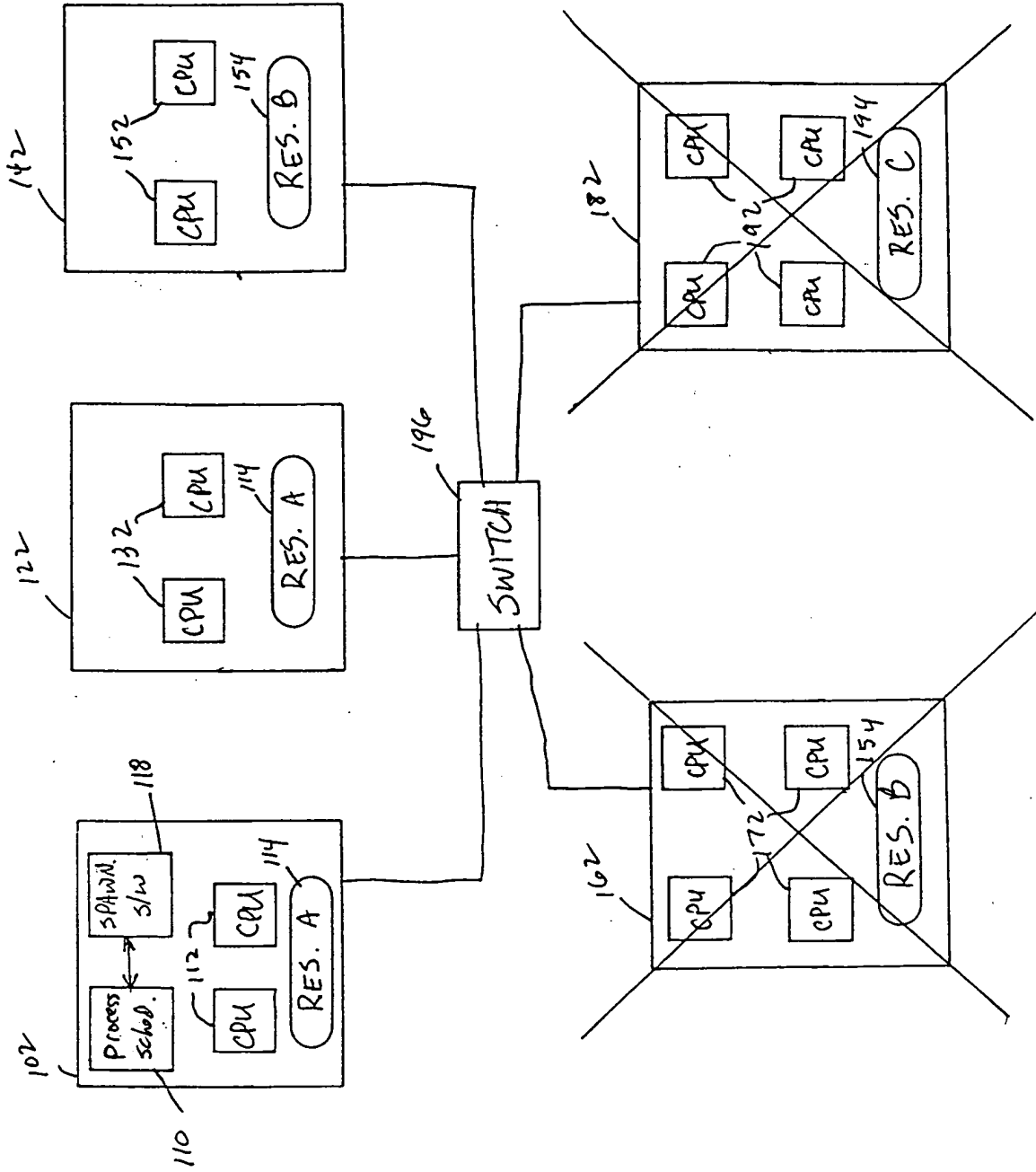262 Spawn processes using user specified application and no. of processes

100

102

110 — process schedl. ↔ SPAWN s/w — 118

112 — CPU CPU — 114
RES. A

122

132 — CPU CPU — 114
RES. A

142

152 — CPU CPU — 154
RES. B

162

172 — CPU CPU CPU CPU — 154
RES. B

182

192 — CPU CPU CPU CPU — 194
RES. C

SWITCH — 196

FIG. 5

FIG. 6